Does Dividend Stability Provide a Promising Stock Return? Evidence from Bursa Malaysia

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ABSTRACT

This paper examines whether there is any significant impact between a stable dividend policy and firm performance. More recent empirical studies have looked at the association of dividend stability with risk factor. Stable dividend signals the stability of the underlying cash flow as this translates into lower level of uncertainty and business risk, while variable dividend stream will increase fluctuation of cash flows in the hands of shareholders. Thus they will require a higher rate of return in order to compensate them for the uncertainty of cash flows that they have to endure. Using 120 stocks from seven different industries in Malaysia covering over a period of six years from 2001 to 2005, our results suggest that there is no significant impact of dividend stability on stock market return. The results further reveal that dividend stability does differs significantly across different industry sectors.

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Introduction

Dividend policies tend to be one of the more stable and predictable elements of a company and most companies began to pay dividends once they reach a level of business maturity where attractive investment opportunities are generally less available while cash flow generation is stable or growing more slowly in the past. Decreasing or eliminating a dividend is tantamount to an announcement that the firm is financially distressed. Directors weigh dividend policies very carefully, rarely lowering dividends unless they have to, and not raising dividends unless they are confident that they can be sustained. When a company announces a larger than expected dividend or unexpectedly announces a dividend cut or omission, the market reaction is dramatic and sudden. Thus a stable dividend policy should convey stability or lower risk within the enterprise.

The objective of this paper is twofold. First we intend to revisit the stable divident hypothesis to determine whether stocks with dividend stability are able to produce abnormal returns. Second, we intend to examine whether dividend stability differs across different industries.

Review of Previous Studies

Stable Dividend Hypothesis

The central hypothesis explored in this study is that stocks with higher level of stability in their dividend payment should have higher prices as compared to

those with fluctuating dividend payments, which also refers to as the stable dividend hypothesis (Beer, 1994).

Miller and Modigliani (1961) were the first to confront the issue of dividend relevance. The authors demonstrated that firm valuation was independent of dividend policy when using the assumption of perfect capital markets. Nevertheless studies subsequent to that have indicated that the higher dividend, the better firm value will be while study on the implication of stability in dividend policy has received its fair share of attention amongst researchers.

The significance of dividend stability in the eyes of corporate managers was first highlighted in the classical behavioral research of Lintner (1956) on US companies. His survey revealed that firms normally have their long-term target payout ratio and managers believe that shareholders preferred a steady increase of dividend and are willing to pay premiums for the stability. Managers were found to be concerned more about dividend changes than absolute level of dividend. Hence, they managed their dividend in a way that gradually adjusted to its targeted payout ratio. This behavior is often called dividend smoothing. In order to avoid dividend fluctuation, they would not simply increase the payout ratio unless they are confident that the increase would not need to be reversed in the future.

Managers, especially of large, mature firms, realize that their investors typically prefer stable and dependable dividends. Surprisingly, firms adopting a residual

dividend policy had even considered maintaining dividend stability to be more important. In order to maintain the stability, they do not adopt a pure residual policy on a yearly basis; rather, they adopt "modified residual policy" (Baker and Smith, 2002), whereby they plan their residual payments over a few years. They will first make a long-term forecast on their future earnings, investment plans and free cash flow to set their long-run targeted dividend payout ratio. Then the long-term payout ratio, for example over the future five years, will be spread out though out the five years to maintain dividend stability. In effect, managers should use the residual model to set dividends, but in a long-term framework (Brigham and Ehrhardt, 2005).

In order to examine the relationship between dividend policy and firm's value over a longer period, Steven and Jose (1992) have employed a wider range of dividend policy measurements. These include (a) level of dividend, (b) dividend stability and (c) conscious dividend smoothing over time. These measures are represented respectively by (a) average payout ratio, (b) dividend stability around the dividend time trend and (c) payout ratio volatility. As for measure of longer-term firm value, he used Tobin's q instead of short-run stock price or return measures. Tobin's q is the ratio of the firm's market value to replacement cost of the firm's assets.

The results from Steven and Jose's paper had added additional support to the traditional finding that higher dividend commitment hurt the value of the firm. This

was reflected in the negative relationship between dividend yield and payout ratio respectively with 'q' value. Dividend smoothing (measured by standard deviation of payout ratio) was also found to be negatively related to 'q' value. On the other hand, stability of dividend (measured by variation of dividend per share around a growth trend) was found to be positively related to 'q' value. It was concluded that stability itself will not provide positive effect to firm's value unless it is supported with steady payout ratio. Artificial stabilized dividends through smoothing (volatile payout ratio) will not be valued by the investors. When dividend payout ratio is smoothed, amount of dividend payment will be volatile. While many firms follow a dividend smoothing approach, market value premium for such policy had not been established at the point of Steven and Jose's writing.

Subsequently many researchers have made efforts to find out more evidences about stable dividend policy. Clientele and signaling theories are two fundamental premises on which SDH is established. Provided that these theories hold water, a volatile change in dividend will cause volatility in the share prices due to (a) investors selling their stock and forcing the stock price down, and (b) signals from the dividend change, be it positive or negative signals. The logic from hereon is to relate volatility to business risk of the stocks: A track record of dividend stability can be taken as a signal of lower business risk. This is how stability in dividend is chained up with reduced share price volatility and decrease risk factor to justify for a market price premium. This SDH is able to sustain partly because of recognition in the financial community (Beer, 1994).

Gombola and Liu's (1993) empirical test on US stocks from 1969 to 1984 confirmed that, even after adjusting for January and size effect, stocks firms combining stable dividend and high yields outperformed those that only paid high yield but without a history record of stable dividend payment. "Even with modern portfolio theory, dividend stability is associated with special risk characteristics" (Gombola and Liu, 1993). However, there is no significant impact from dividend stability on stocks with low yield.

Gwilym *et al* (2000) had adopted Gombola and Liu's approach for his test on UK environment, with an improved methodology (as he had claimed). Both empirical tests on different stock market provide consistent results. Firstly, they both showed a clear inverse correlation between beta and stability whereby Gwilym *et al* (2000) further showed that this inverse relationship held true not only for high dividend-yield stocks but for stocks with low yield as well. Gombola and Liu (1993) indicated that dividend stability merely reinforced the relation between yield and systematic risk. Like wise, results of Gwilym et al (2000) showed that although dividend stability has an impact on stock return (by way of reducing systematic risk), stock return was primarily driven by dividend yield.

Apart from the above, Beer (1994) and Sahu (2002) provided further empirical evidence from Belgium and India market respectively for insignificant impact of dividend stability on share performance. To test the impact of dividend stability on share price, Beer (1994) performed a regression of share prices against four

variables on an annual basis from 1974 to 1986, out of which one of them was dividend instability measure. His result showed a non-significant coefficient of the dividend instability variable which meant that dividend instability was not a significant factor influencing share prices. Sahu (2002) used a different approach whereby he defined abnormal returns as the difference between stock returns and market return and he then performed a regression of abnormal returns against dividend stability. Similarly his result found no significant relation between abnormal returns and dividend stability.

Industrial Effect on Dividend Policy

Industry effect can be defined as common correlations with determinants of dividend payout by firms in the same industry that make them distinctive from firms in other industries (Dempsey, Laber and Rozeff, 1993). This is possible because firms within the same industry may have similar exposure of investment opportunities, earnings stability and fund availability. Michel (1979) analyzed differences in dividend yields and dividend payout ratios during 1967 to 1976 among 13 industries and he found significant differences in these variables across the different industry groups. Dempsey at el (1993) however, commented that these differences could be due to the common firm-specific attributes that bind them together and distinctive from other firms outside their respective industry and not because of industry membership differences. In other word, other companies from different industries may also have the similar dividend attributes if their firm-specific factors are similar. However, these firm-specific

factors had not been controlled in Michel's (1979). After controlling for these factors, Dempsey at el (1993) found little significant difference in dividend payout ratio among firms from different industries.

Data and Methodology

This analysis includes firms from seven industries based on Bursa Malaysia's classification. They are Consumer Product, Industrial Product, Construction, Trading/Services, Finance, Properties and. Plantation. We use standard deviation of dividend to measure dividend stability thus the higher the standard deviation, the lower is the dividend stability. In this study we obtain abnormal return for each sample stock by comparing expected stock return (E(Rj)) with actual stock return (Rj). CAPM is used to determined stocks' respective expected returns. The E(Rj) is then deducted from actual stock return to arrive at AR.

Sample period of five years from 2001 to 2005 has been selected to provide further evidence about the impact of dividend stability on share performance. The population of firms includes all companies listed on the main board of KLSE with the following exception:

(i) Real Estate Investment Trusts, Closed-End Fund and Exchange Traded Funds.

(ii) Stocks from infrastructure, hotels, technology and mining sectors because the number of firms is too small to provide a reasonable sample size for research purposes.

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(iii) Stocks that do not pay dividends every year throughout the sample period.

(iv) Stocks under PN4 and PN17 (non-performing companies) as at year 2006.

(v) Stocks that have undergone share consolidations or share splits because unit share price and computation of stock return in the month of share split or share consolidation will be affected.

After the above filtering process, the sample size has been reduced to 120 stocks from seven industries classified by Bursa Malaysia:

Analysis of Results

Descriptive Statistics

Table 1 shows that the overall mean and standard deviation for average monthly abnormal return is 0.002 and 0.011 respectively. Construction sector records the lowest mean whereas industrial product and plantation sectors record the highest mean. Standard deviations for average monthly abnormal return for all sectors do not fluctuate much from the overall standard deviation.

Table 1: Summary of descriptive statistics for average monthly abnormal return

	All sample stock	CO	CP	F	IP	P	PR	TS
Number	120	10	17	14	19	18	18	24
Minimum	-0.027	-0.016	-0.014	-0.016	-0.007	-0.012	-0.016	-0.027
Maximum	0.036	0.010	0.036	0.022	0.033	0.030	0.020	0.021
Mean	0.002	-0.008	0.004	-0.0004	0.007	0.007	0.0002	0.001
Standard deviation	0.011	0.009	0.011	0.010	0.010	0.009	0.009	0.011

CO-Construction, CP-Consumer product, F-Finance
IP-Industrial product, P-Plantation, PR-Property, TS-Trading & Service

In Table 2 we found that overall mean for DPS volatility measured as SDDPS is 0.051 with the highest mean from consumer product sector at 0.103 and lowest mean from construction and property sectors both at 0.020.

Table 2: Summary of descriptive statistics for standard deviation of DPS

	All sample stock	CO	CP	F	IP	P	PR	TS
Number	120	10	17	14	19	18	18	24
Minimum	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000
Maximum	0.364	0.039	0.364	0.260	0.260	0.120	0.079	0.229
Mean	0.051	0.020	0.103	0.057	0.048	0.046	0.020	0.051

Table 3 presents the overall mean for DPS volatility as measured by SDΔDPS. The overall mean is found to be 0.051 with the highest mean from consumer product sector at 0.109 and lowest mean also from construction and property sectors both at 0.020.

Table 3: Summary of descriptive statistics for standard deviation of changes in DPS

	All sample stock	CO	CP	F	IP	P	PR	TS
Number	120	10	17	14	19	18	18	24
Minimum	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.000
Maximum	0.419	0.037	0.419	0.228	0.171	0.199	0.076	0.213
Mean	0.051	0.021	0.109	0.059	0.043	0.051	0.020	0.047

Regression Results between Stock Abnormal Return and Dividend Stability

Table 4 presents the summary of the Pearson Correlation and the regression results between abnormal return and the standard deviation of dividend per share.

Table 4

Pearson correlation and regression result between abnormal return (AR) and Standard Deviation of Dividend per Share (SDDPS) as well as with Standard Deviation of Change in Dividend per Share (SDΔDPS)

	Measure 1 (SDDPS)	Measure 2 (SDΔDPS)
Pearson correlation (2-tailed):		
Coefficient	0.152	0.069
p value	0.097	0.457
Regression:		
Slope coefficient, λ	0.024	0.010
Constant	0.001	0.002
Calculated F-statistic	2.792	0.557
Critical F-statistic	3.92	3.92
t-statistic	1.671	0.747
p value	0.097	0.457
R square	0.023	0.005
No. of observation: 120		

Pearson correlation of 0.152 shows that abnormal return (AR) is positively correlated with the first measure of dividend volatility, i.e. standard deviation of DPS but this correlation is not significant at the level of p=0.05. Result of simple regression of AR on SDDPS further shows that the causal relationship between SDDPS is even lower with a regression coefficient of 0.024 only with p-value of 0.097, F-value of 2.792 and t-value of 1.671. These statistics show that this regression correlation is not significant at p=0.05 (calculated F-value of 2.79 < critical F-value 3.92 and p > 0.05). R^2 value of 0.023 indicates that only 2.3% of variation in AR is explained by variation in SDDPS. Both Pearson correlation and regression correlation are not significant at p=0.05 significance level. Hence, null hypothesis H_{01} that there is no relationship between dividend stability (measure 1) and stock abnormal return can not be rejected, indicating that AR is not significantly related with SDDPS at p=0.05.

Pearson correlation with respect of AR and the second measure of dividend volatility, i.e. SDΔDPS is also positive with correlation coefficient of 0.069 but again it is not significant at p=0.05. Similar to the result for SDDPS, this result means that there is no significant correlation between AR and SDΔDPS. Moreover, the extent of correlation of SDΔDPS with AR is lesser as compared to the correlation of SDDPS because SDΔDPS disregard constant change as volatility. Regression result (calculated F-value 0.557 < critical F-value 3.92 and p > 0.05) in respect of this causal relationship is also lower at 0.01 as compared to regression coefficient of AR and SDDPS, like wise for the F-value of 0.557 and t-

value of 0.747. Therefore, null hypothesis H_{02} that there is no relationship between dividend stability (measure 2) and stock abnormal return can not be rejected, indicating that AR is not significantly related with SDΔDPS. This is supported with a low R^2 value of 0.005.

The above result shows that stock market behavior in Malaysia during year 2001 to 2005 has not supported SDH which implies that stocks that pay stable dividends should outperform others for providing more certainty of cash flows to investors. Rather the findings provide some evidence to validate dividend irrelevance proposition advocated by the famous Modigliani and Miller (MM). Perhaps, there are other important factors contributing of the variation in AR, such as earnings, systematic risk factor, growth rate or even market anomalies.

This empirical evidence is consistent with most of the previous empirical studies being reviewed which showed no significant implication of dividend variation on stock performance. In Malaysian local market context, the current finding has not deviated much from the previous empirical studies. For instances, Fauzias and Yatim (1994) found no significant relationship between a change of share prices and constant dividend payments.

Evidence on Industry Classification and Dividend Stability

Following Michel (1979) and Pandey (2001) and in lieu to the non fulfillment of the requirement for homogeneity of variances, non-parametric test i.e. the

Kruskal-Wallis H one-way analysis of variance of ranks has been applied in order to determine whether dividend volatility differ significantly by industrial classification. Result for Kruskal-Wallis test is summarized as below:

Table 5

K-W H test of the effect of industry classification on dividend volatility

	Measure 1 (SDDPS)	Measure 2 SDΔDPS
Chi-Square	14.773	14.275
Df	6	6
Asymp. Sig	0.022	0.027

Kruskal-Wallis H test statistic above indicates that both SDDPS and SDΔDPS differ across the seven industry groups at significant level of 0.05 (calculated Chi-square > critical value of 12.59 and $p < 0.05$). Hence, null-hypothesis H_{03} that there is no significant difference in SDDPS for firms from different industries is rejected at significant level of $p = 0.05$. Like wise for H_{04} that there is no significant difference in SDΔDPS for firms from different industries is also rejected at significant level of $p = 0.05$.

5.0 Conclusion

In this study, we focus on the implication of dividend in term of its stability on the share performance and whether the dividend stability varies across different industry sectors.

The first and second null hypotheses that there is no significant relationship between dividend stability and stock abnormal return are tested using a Pearson correlation and simple regression tests. The third and fourth null hypotheses that there is no significant difference in dividend stability for firms from different industries are tested using non-parametric Kruskal-Wallis-H test because requirement for homogeneity of variance among groups for ANOVA have not been met.

Several findings can be summarized from this study. Pearson correlation and regression analysis under the two different dividend stability definitions produce the same result in favor of the first and second null hypotheses that there is no significant implication of dividend stability on share performance.

In respect of whether dividend stability differs across industry groups, Kruskal-Wallis-H test results does not support the third and fourth null hypothesis that there is no significant difference in dividend stability for firms from different industries.

Nevertheless, SDH (the importance of paying stable dividend) has remained well recognized among the financial community; firms that pay consistent dividend are normally viewed more favorably in the eyes of bankers, investors and public in general.

REFERENCES

Baker, H. Kent and David M. Smith (2002), *In Search of a Residual Dividend Policy*, thesis, American University and Albany University.

Beer, F.M (1994), "An Empirical Investigation of the Stable Dividend Hypothesis Using the Brussels Stock Exchange," *American Business Review*, (May), 54-61.

Dempsey, SJ, Gene Laber and Michael S. Rozeff (1993), "Dividend Policies in Practice: Is There an Industry Effect?," *Quarterly Journal of Business And Economics*, 32(4), (Autumn), 1-13.

Eugen F. Brigham and Michael C. Ehrhardt (2005), *Financial Management: Theory and Practice*, 11th ed., Thomson and South-Western.

Fauzias Mat Nor and Yatim (1994), "A Note on the Malaysia Experience on the Share Prices Reaction to Dividends and Earnings," *Malaysian Management Review,29(2),* 38-43.

Gwilym AP, Gareth Morgan and Stephen Thomas (2000), "Dividend Stability, Dividend Yield and Stock Returns: UK Evidence," *Journal of Business Finance & Accounting*, 27(3) & (4) (April/May), 261-281.

PERPUSTAKAAN UNIVERSITI MALAYA

Gombola M. J. and F.Y. Liu (1993),"Considering Dividend Stability in the Relation Between Dividend Yields and Stock Returns", The Journal of Financial Research, XVI(2), (Summer), 139-150.

Jerry L. Stevens and Manuel L. Jose (1992), "The Effects of Dividend Payout, Stability and Smoothing on Firm Value," *Journal of Accounting, Auditing and Finance*, 7(2) (Spring), 195-212.

Lintner, J. (1956). Distribution of Incomes of Corporations Among Dividends, Retained Earnings and Taxes, *American Economic Review*, 97-113

Miller M and Modigliani F (1961), "Dividend Policy, Growth and the Valuation of Shares," *The Journal of Business*, 34(4), (October), 411-433.

Michel, Allen (1979), "Industry Influence on Dividend Policy", *Financial Management*, 8(3) (Autumn), 22-26.

Pandey, I. M. (2001), "Corporate Dividend Policy and Behaviour: The Malaysian Evidence," *Asian Academy of Management Journal*, 8 (1) (January), 17-32.

Sahu (2002), "An Empirical Test of Stable Dividend Hypothesis," *Finance India*, 16(2), (June), 613-626.